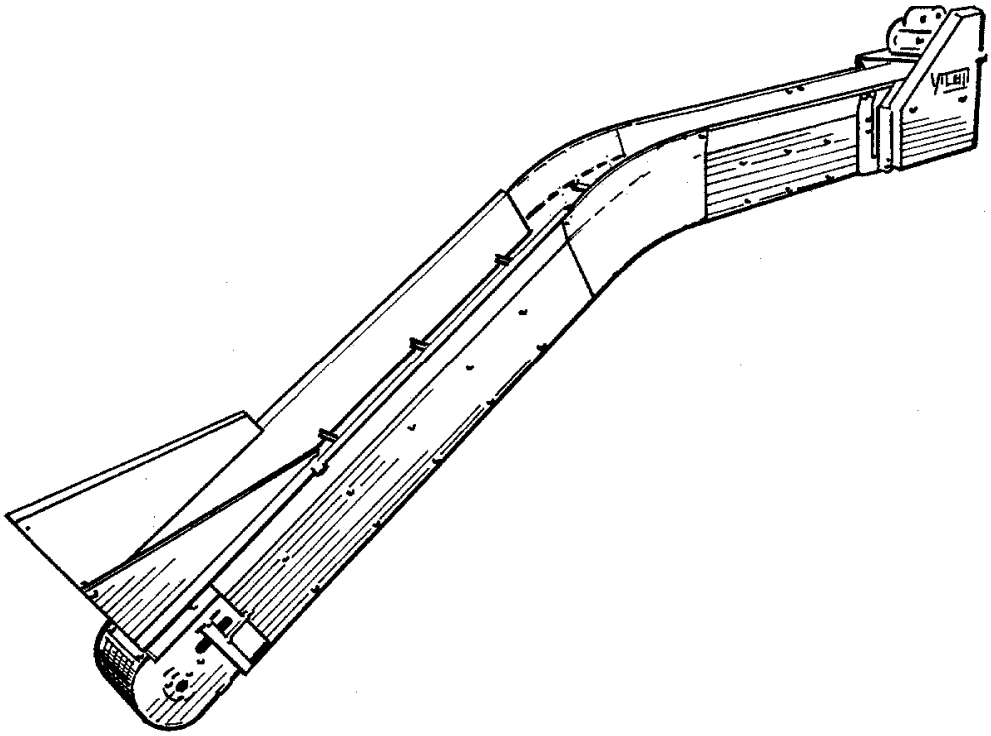
VAL METAL



11 ½" MODEL
SINGLE CHAIN CONVEYOR

USER'S MANUAL

CONTENTS

WARRANTY **3**

FOREWORD **4**

SAFETY PRECAUTIONS **5**

ASSEMBLY INSTRUCTIONS **6**

SPECIFICATIONS 6

ASSEMBLING CONVEYOR 7

ADJUSTING CHAIN 8

STARTING-UP **9**

MAINTENANCE **9**

PARTS LIST **11**

LIMITED WARRANTY

BASIC WARRANTY AND REMEDIES

All VALMETAL products are warranted against defects in workmanship and materials for one year from date of delivery to the first purchaser. The warranty repair period for equipment used for commercial or rental purposes is limited to 90 days from date of delivery to the first retail purchaser.

VALMETAL will repair or replace, free of charge, at its option, F.O.B. factory, freight prepaid, any parts proved defective in workmanship or materials. It is agreed that such replacement or repair is the exclusive remedy available from Valmetal, should any of Valmetal's products or parts prove defective. Valmetal will not be responsible for freight and labor charges involved for removing and replacing defective parts.

EXCEPTIONS FROM THIS WARRANTY

This warranty covers equipments under normal use and service, does not cover conditions resulting from misuse, negligence, alteration, accident or lack of performance of required maintenance. Replacement of maintenance items such as belts, chains, wear bars, etc... are not covered.

EXCEPTIONS FROM THE WARRANTY

Motors are warranted directly by the motor manufacturer only and not by Valmetal.

LIMITATION OF LIABILITY

This warranty is in lieu of all other warranties, express or implied, written or oral. No employee, agent, dealer or any other person is authorized to give any warranties on behalf of Valmetal, nor to assume for Valmetal any other liability in connection with any its products. IN NO EVENT SHALL THE OWNER BE ENTITLED TO RECOVER FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES SUCH AS, BUT NOT LIMITED TO, LOSS OF CROPS, LOSS OF PROFITS OR REVENUE, OTHER COMMERCIAL LOSSES, INCONVENIENCE OR COST OF RENTAL OR REPLACEMENT EQUIPMENT.

FOREWORD

This manual describes the installation, operation and maintenance of the 11 ½" chain conveyor from VALMETAL. Be sure to read it carefully before operating the machine or providing maintenance for it in order to obtain a thorough knowledge of efficient and safe procedures.

IDENTIFICATION

A name plate riveted to the side of the drive unit bears specification and serial numbers of the unit. Refer to these numbers when ordering parts.

Serial number : _____
Model number : _____

WARRANTY

This piece of equipment is covered by warranty described on previous page. Your dealer will explain the warranty agreement and will complete the delivery and warranty registration form.

NOTE : The warranty is valid only if both dealer and customer or their representatives have completed and signed the warranty registration form, and that the completed form is received by **VALMETAL** within 15 days from the date of installation.

SAFETY ALERT SYMBOL

Pay special attention to this safety alert symbol, it indicates an important safety message. For your protection, we urge you to read all safety messages found in the manual and on safety signs adhered to the machine.

SAFETY PRECAUTIONS

- Keep **ALL** guards in place.
- **DO NOT** attempt to clean, oil or adjust machine while in operation.
- Keep hands, feet and clothing **AWAY** from power driven parts.
- **BE SURE** main switch is off before resetting motor thermals.

OPERATE EQUIPMENT SAFELY

Do not allow anyone to operate, make adjustment or lubricate before reading and understanding this manual.

Controls should be located so the complete machine can be observed during operation.

Do not allow children or unauthorized personnel to operate the conveyor.

Leave all guards, shields and safety devices in place.

Never allow anyone near conveyor while operating.

Be sure area is clear before operating conveyor.

Keep alert when operating equipment.

Should any damage to equipment occur, shut off and lock out power immediately, make necessary inspection and repairs before restarting and operating.

After using equipment, shut off and lock out power.

Never leave a machine running unattended.

Failure to heed warnings may result in personal injury or death.

PRACTICE SAFE MAINTENANCE

Disconnect and lock out power before adjusting or servicing.

Make certain the motor and all other moving parts have stopped before making adjustments or leaving equipment.

Keep all hardware tight and properly adjusted.

Do not allow anyone to make adjustment or lubricate before reading and understanding this manual.

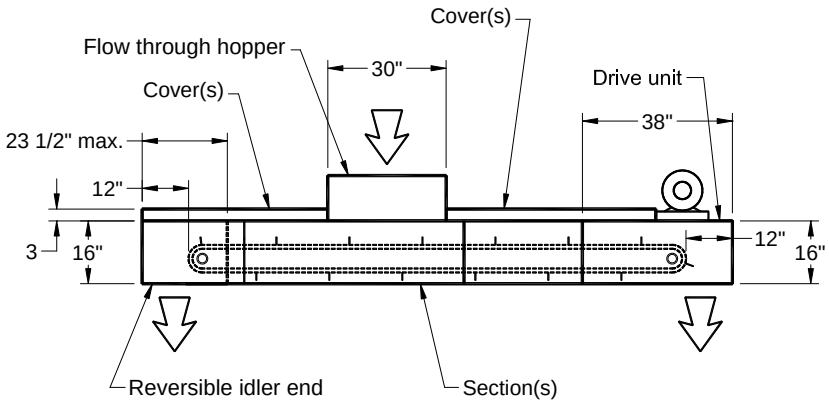
Keep all safety signs clean and readable.

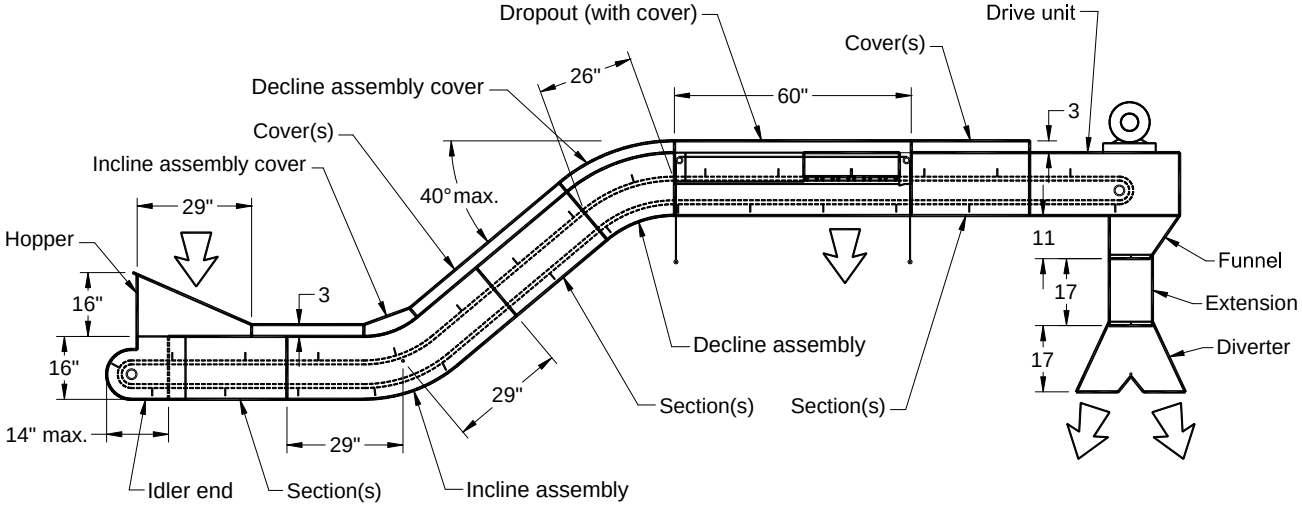
Failure to heed warnings may result in personal injury or death.

ASSEMBLY INSTRUCTIONS

SPECIFICATIONS

In order to calculate space required for sections, look at these exemples :





ASSEMBLING CONVEYOR

1. Assemble section sides with splice plates, carriage bolts must be installed as shown on page 13, inside out.

NOTE: The conveyor must be supported at both ends and everay 20 ft maximum. It must be straight for its total length.

2. Install decline assembly as shown on page 14.

NOTE : Conveyor must be supported at the horizontal end of the decline assembly.

3. Install incline assembly as shown on page 15.

NOTE : Conveyor must be supported at the horizontal end of an incline assembly.

4. Install drive end to the end of the section and complete assembly as shown on page 10.

5. Install idler end to the end of the section and complete assembly as illustrated on page 11.

6. Install reversible drive end as shown on page 12 (if applicable).

7. Install dropout as shown on page 16.

8. Pass the chain in the conveyor respecting the following : The rubber paddles must face the drive end on the upper pan and face the idler end in the lower pan

NOTE: Make sure the idler end is all the way in so that the chain can be tightened (as explained on the followin page).

WARNING : ELECTRICAL POWER CONNECTION
All electrical work should be carried out by a qualified electrician in order to prevent accidents or damage, and in accordance with all local regulations.

CAUTION : Don't take chances, make sure everyone is clear of machine before operating.

ADJUSTING CHAIN

FOR SINGLE DIRECTION CONVEYORS

1. Tighten chain at idler end of conveyor. Chain should be adjusted so chain can be raised 6¨to 8¨at center of 20' span.

FOR REVERSING CONVEYOR

2. Tighten chain at idler end of conveyor. Chain should be adjusted so chain can be raised 3¨to 4¨at center of 20' span.

3. First make sure that the adjusting bolts at the idler end are tightened equally.

4. Start the motor and verify that the chain fits well in the sprocket teeth and is centeredfor the total length of the conveyor.

5. If an adjustment is necessary **TURN OFF THE MOTOR** and lock out power source, then do the required adjustments. Verify the adjusting bolts on the idler end.

6. Tighten all bots.

NOTE : When tightening the chain allow it to run at least a full chain revolution to determine if additional adjustments are required. Check tension while machine is loaded. Check frequently during the first 10 hours of operation. Check periodically afterwards.

STARTING-UP

CAUTION: Don't take chances, make sure everyone is clear of machine before running.

It takes many hours of running, under full load, for the chain to reach its highest efficiency. The chain may, if necessary, be put to work under full load immediately. However, to maximize the lifetime of the machine, it is recommended to run it under gradually increasing loads and to reach a full load only after about 20 hours.

MAINTENANCE

CAUTION : Make sure the power is off before inspection.

Regularly inspect bolts and screws for tightness because loose fasteners can cause misalignment and excessive wear.

Monthly lubrication

- Grease all bearings.
- Oil drive chain. Use light weight oil.

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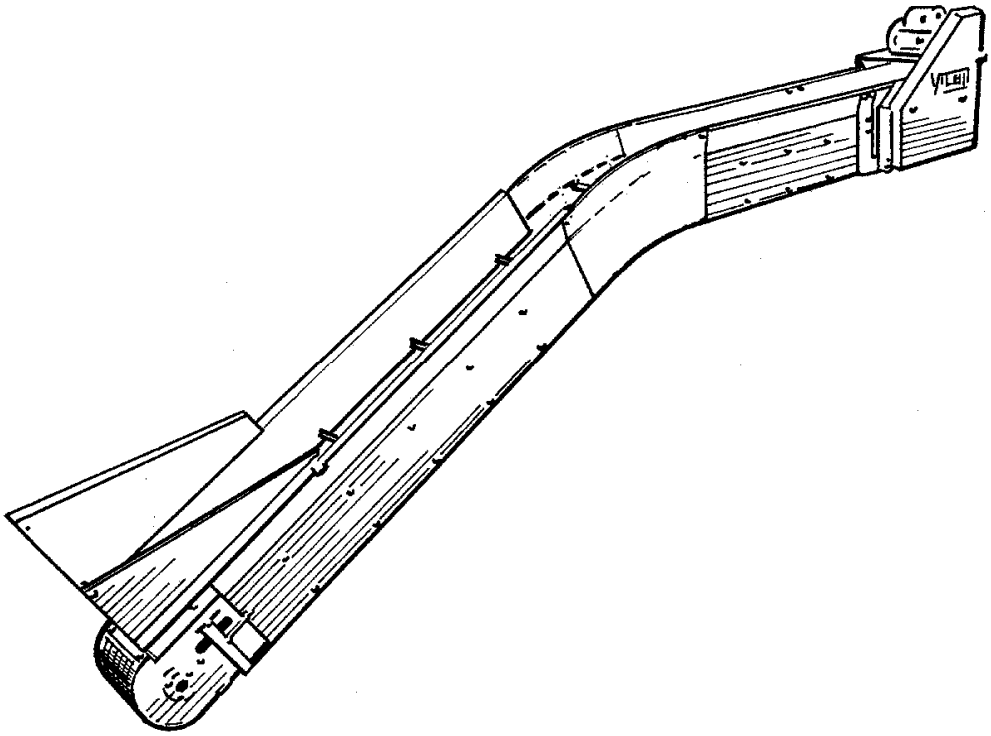
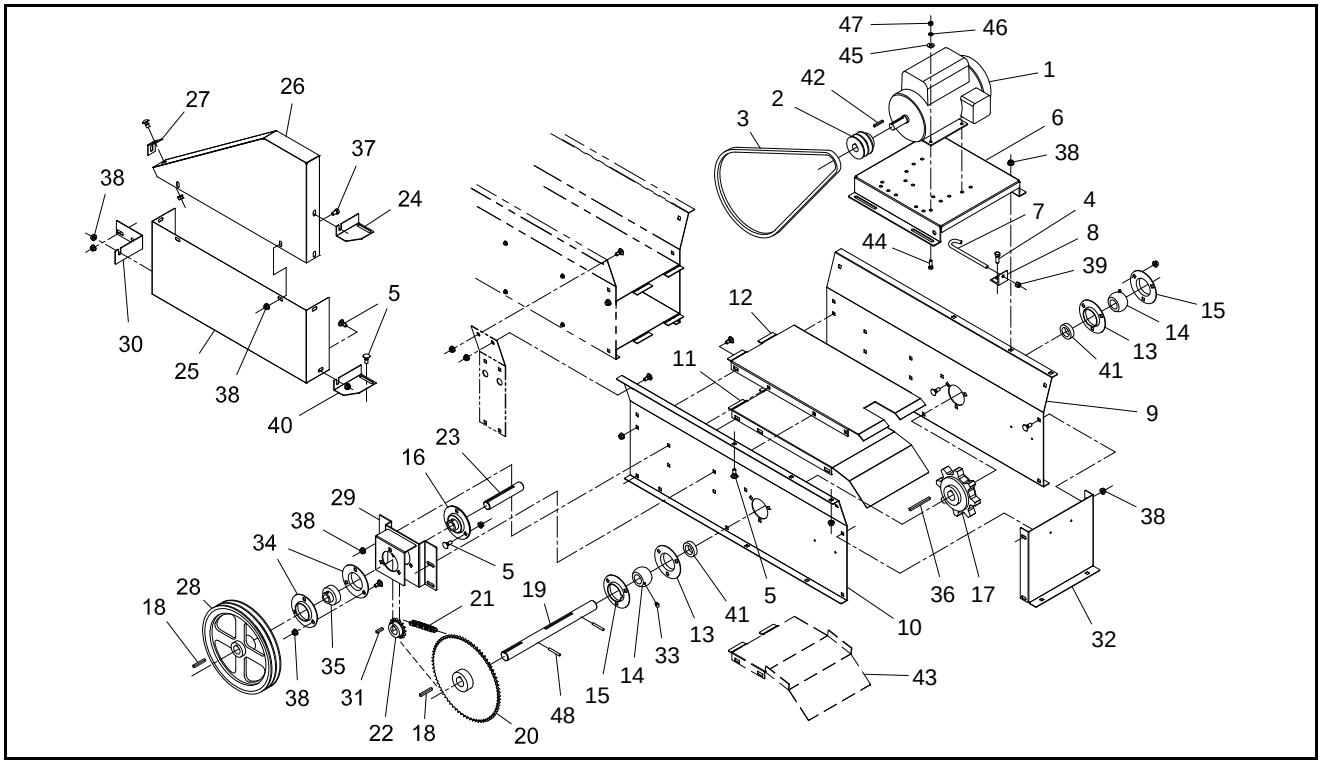


11 ½ " MODEL
SINGLE CHAIN CONVEYOR

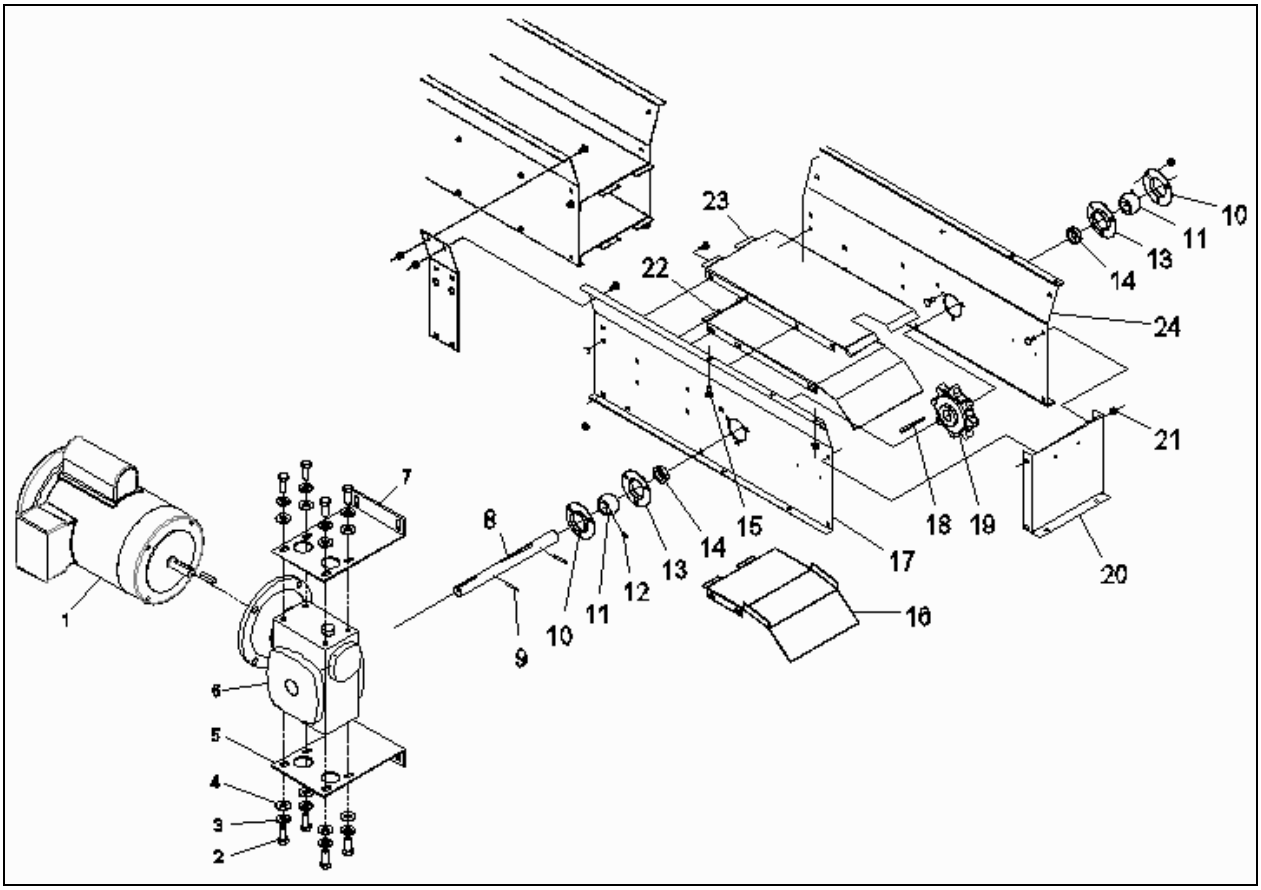
PARTS LIST



Standard Drive section

ITEM	PART NO.	DESCRIPTION
1		Motor
2	41-2MA30-.625	Pulley
3	42-A64	"V" belt A-64
4	01C17-0114	3/8" x 1" Hex. bolt
5	01C04-0107	3/8" x ¾" Carriage bolt
6	VS-4067	Motor base
7	VS-4068	Belt tightener
8	VS-4069	Angle
9	VS-4070	Head plate
10	VS-4071	Head plate
11	VS-4072-1	Lower pan
12	VS-4073	Upper pan
13	40-F6Z	Flange
14	40-EFF-20J	Bearing
15	40-F6ZG	Flange
16	VS-4077	Bearing ass'y
17	60-667C8-1.25	Sprocket
18	99-369	¼" x ¼" x 2" Key
19	VS-4080	Head shaft (series 70)
	VS-4154	Head shaft (series 80)
20	60-40B72-1.25	Sprocket 40B72
21	60-40-94	Roller chain complete
22	60-40B15-1.125	Sprocket 40B15
23	VS-4086	Idler shaft
24	VS-4087-2	Shield bracket short

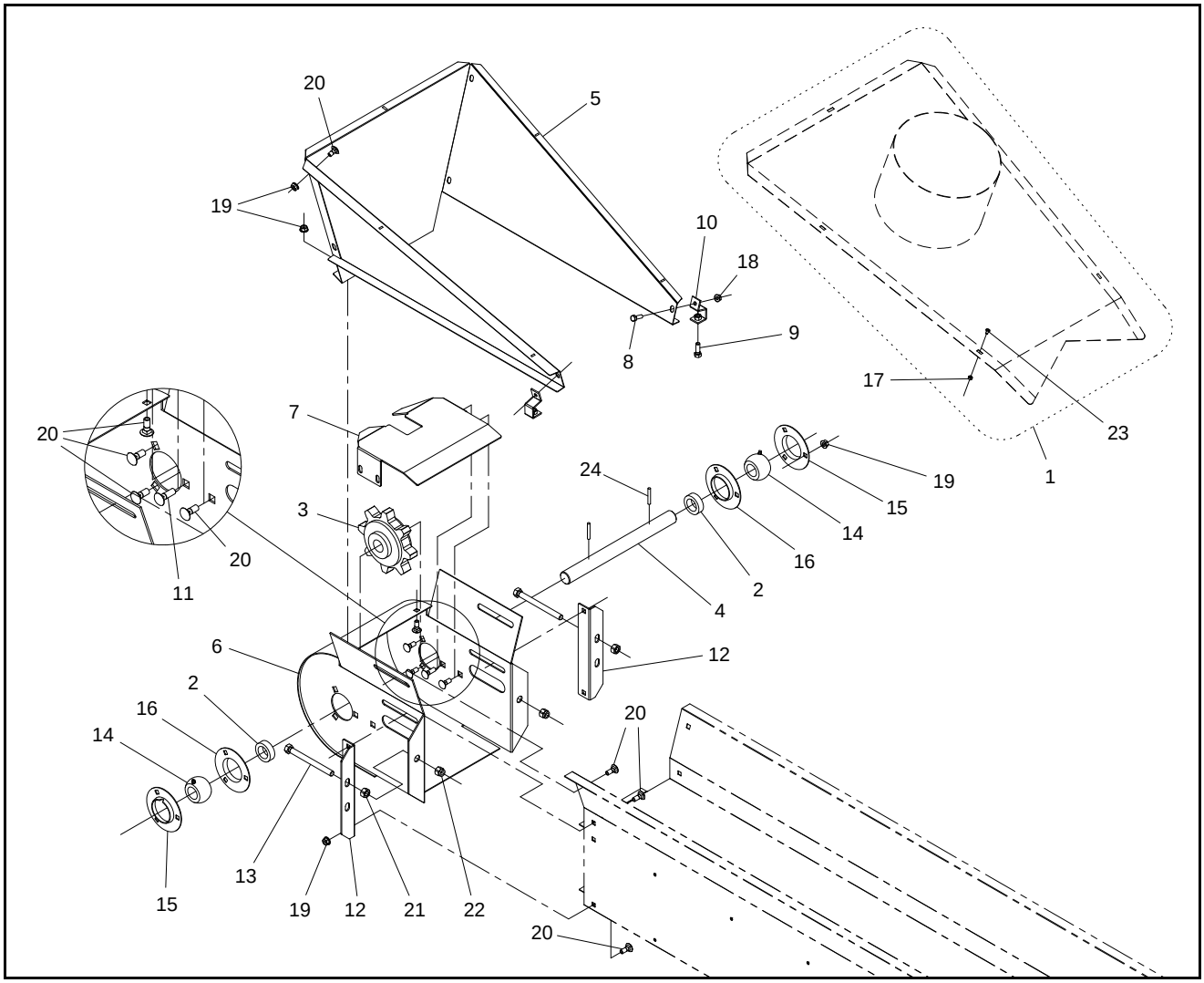
ITEM	PART NO	DESCRIPTION
25	VS-4088	Chain shield
26	VS-4089	Belt shield
27	VS-4090	Shield clip
28	41-2MA120-1.125	Pulley
29	VS-4092	Bearing bracket
30	VS-4093	Shield bracket
31	99-365	¼" x ¼" x 1" Key
32	VS-4095	End plate
33	01C69-0787	Grease fitting 90°
34	40-F6Z	Flange
35	40-SB206-18	1 1/8" Bearing
36	01A41-0925	¼" x ¼" x 2 ¾" Key
37	01C17 0110	3/8" x ½" Hex. bolt
38	01C95-0011	3/8" Flange nut
39	01C96-0011	3/8" Lock nut
40	VS-4087-1	Shield bracket long
41	01C65-0028	1 ¼" Collar (after 2005-12-01)
42		Key (included with motor)
43	VS-4052	Lower pan short
44	01C17-0060	5/16" x 1" Hex. bolt
45	02C22-0010	5/16" Washer
46	02C32-0011	5/16" Lock washer
47	02C07-0017	5/16" Nut
48	01C69-0465	¼" x 2" Spring pin (before 2005-12-01)



Direct Drive section

ITEM	PART NO.	DESCRIPTION
1		Motor
2		Hex. bolts M10 x 30
3		Lock washers 7/16''
4		Washers 3/8''
5	15-527	Gearbox inferior support
6	45-CC70-20H-143	Gearbox
	45-CC80-20H-184	Gearbox
7	15-526	Gearbox superior support
8	VS-4156	Head shaft (series 70)
	VS-4158	Head shaft (series 80)
9	01C69-0465	¼" x 2" Spring pin (before 2005-12-01)
10	40-F6ZG	Flange
11	40-EFF-20J	Bearing

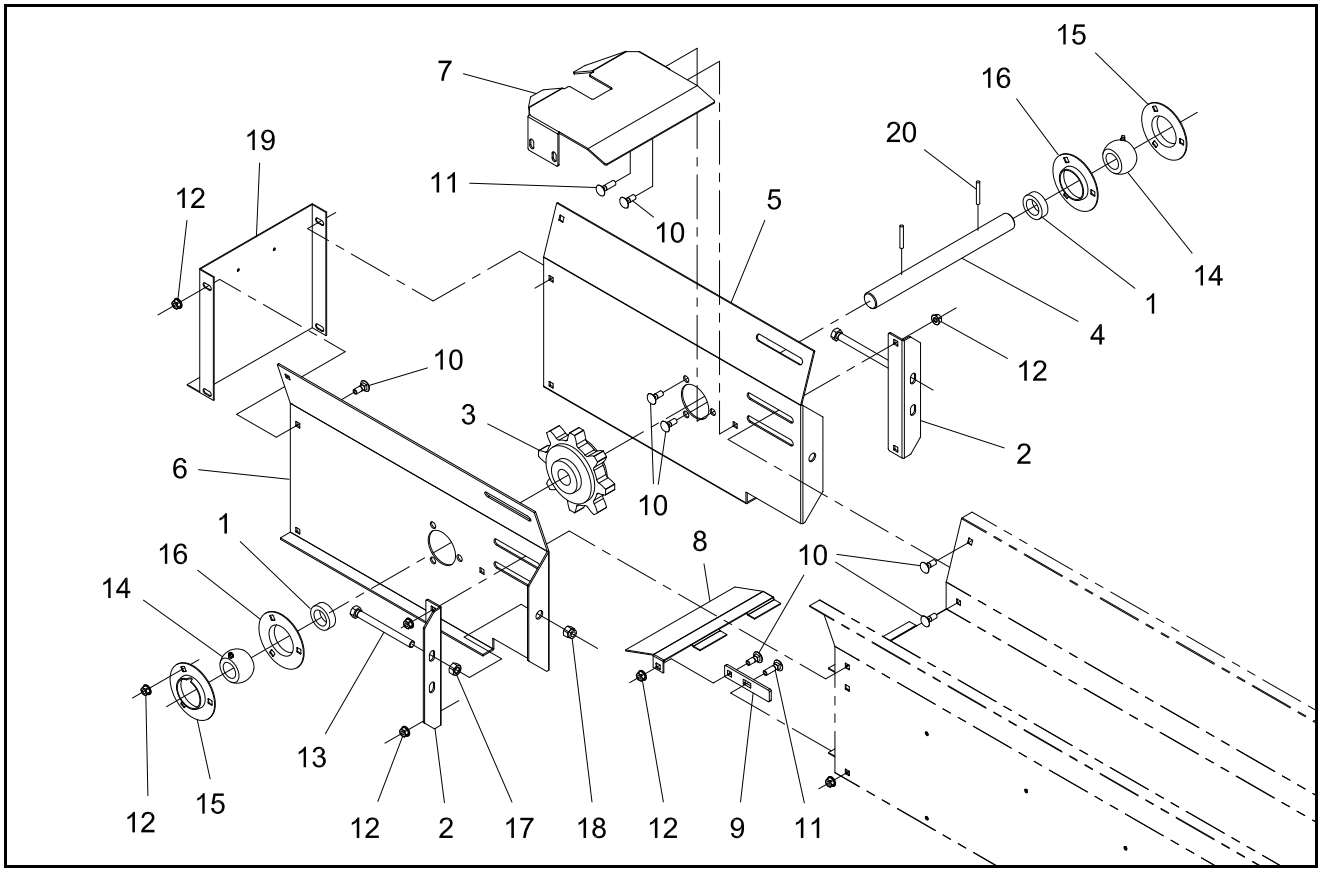
ITEM	PART NO.	DESCRIPTION
12	01C69-0787	Grease fitting 90°
13	40-F6Z	Flange
14	01C65-0028	1 ¼" Collar (after 2005-12-01)
15	01C04-0107	3/8" x ¾" Carriage bolt
16	VS-4052	Lower pan short (option)
17	VS-4071	Head plate
18	01A41-0925	¼" x ¼" x 2 ¾" Key
19	60-667C8-1.25	Sprocket
20	VS-4095	End plate
21	01C95-0011	3/8" Flange nut
22	VS-4072-1	Lower pan
23	VS-4073	Upper pan
24	VS-4070	Head plate



Idler end & hopper

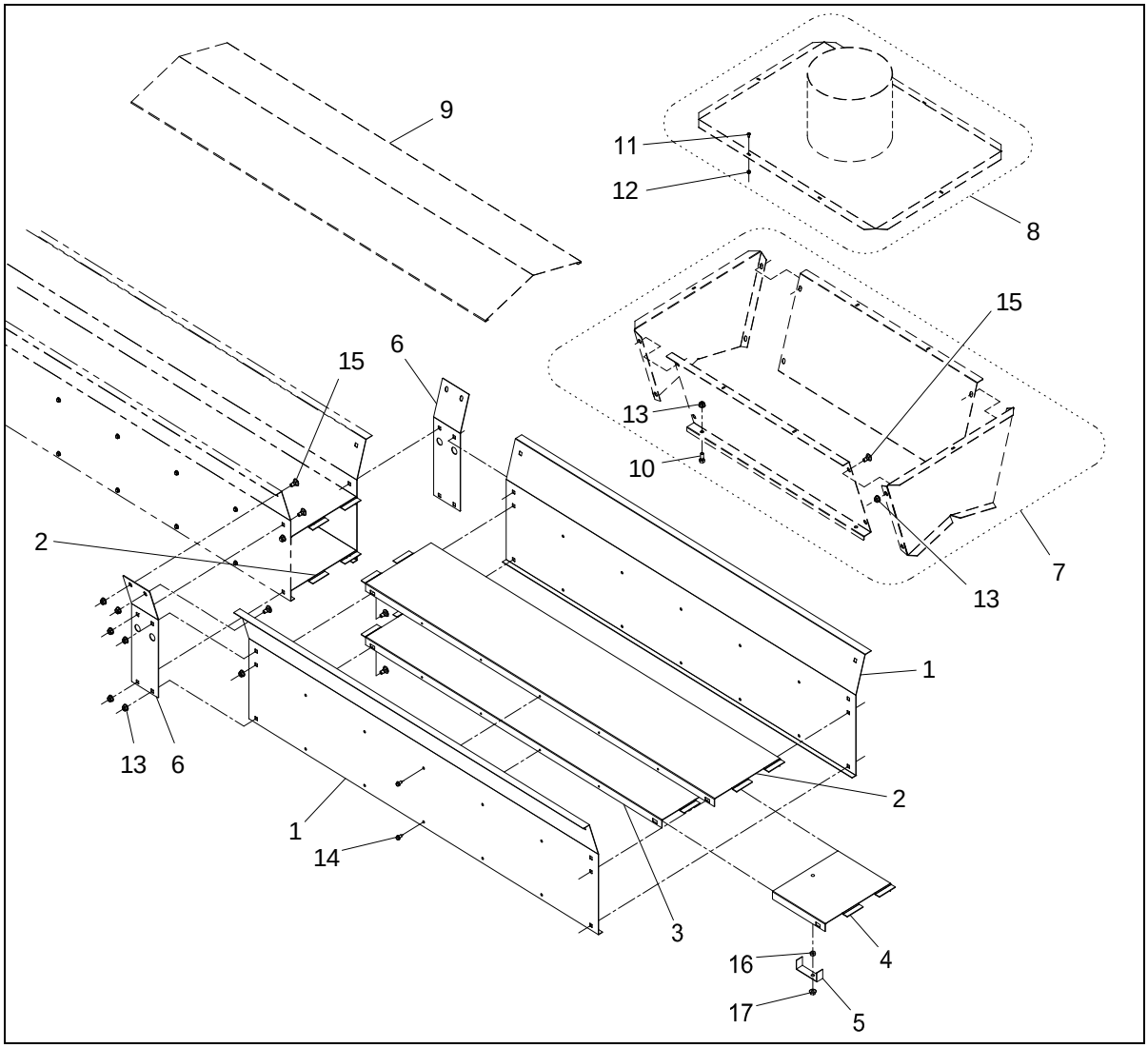
ITEM	PART NO.	DESCRIPTION
1	VM-4043	Hopper cover with 10" adaptor (option)
	VM-4047	Hopper cover with 12" adaptor (option)
2	01C65-0028	1 ¼" Collar (after 2005-12-01)
3	60-667C8-1.25	Sprocket
4	VS-4124	Idler shaft (before 2005-12-01)
	VS-4155	Idler shaft (after 2005-12-01)
5	VS-4125	Hopper complete
6	VS-4126	Base weldment
7	VS-4127	Top pan
8	01C17-0060	5/16" x 1" Hex. bolt
9	01C17-0114	3/8" x 1" Hex. bolt
10	VS-4128	Hopper clamp
11	01C04-0109	3/8" x 1" Carriage bolt

ITEM	PART NO.	DESCRIPTION
12	VS-4129	Adjustment angle
13	CV-4442	Adjusting bolt
14	40-EFF-20J	Bearing
15	40-F6ZG	Flange
16	40-F6Z	Flange
17	02C07-0014	#10-24 Nut
18	01C95-0010	5/16" Flange nut
19	01C95-0011	3/8" Flange nut
20	01C04-0107	3/8" x ¾" Carriage blot
21	02C07-0020	½" Nut
22	01C96-0014	½" Lock nut
23		#10-24 x 5/8" Screw
24	01C69-0465	¼" x 2" Spring pin (before 2005-12-01)



Idler end for reversible conveyor

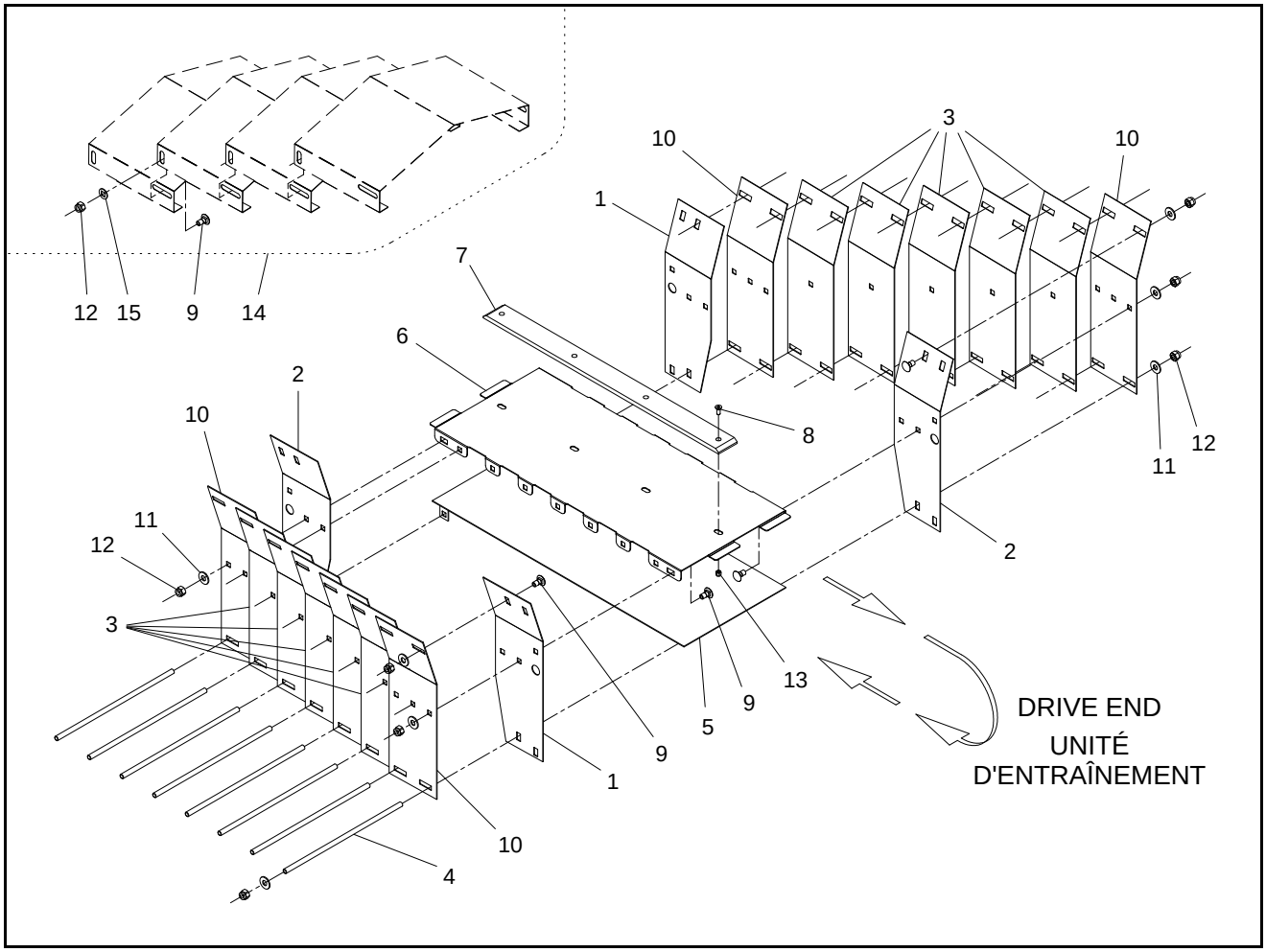
ITEM	PART NO.	DESCRIPTION
1	01C65-0028	1 ¼" Collar (after 2005-12-01)
2	VS-4129	Adjustment angle
3	60-667C8-1.25	Sprocket
4	VS-4124	Idler shaft (before 2005-12-01)
	VS-4155	Idler shaft (after 2005-12-01)
5	VS-4126-REV-G	Side plate
6	VS-4126-REV-D	Side plate
7	VS-4127	Top pan
8	VS-4151	Bracket
9	VS-4152	Bracket support
10	01C04-0107	3/8" x ¾" Carriage bolt
11	01C04-0109	3/8" x 1" Carriage bolt
12	01C95-0011	3/8" Flange nut
13	CV-4442	Adjusting bolt
14	40-EFF-20J	Bearing
15	40-F6ZG	Flange
16	40-F6Z	Flange
17	02C07-0020	½" Nut
18	01C95-0013	½" Lock nut
19	VS-4095	End plate
20	01C69-0465	¼" x 2" Spring pin (before 2005-12-01)



Conveyor section

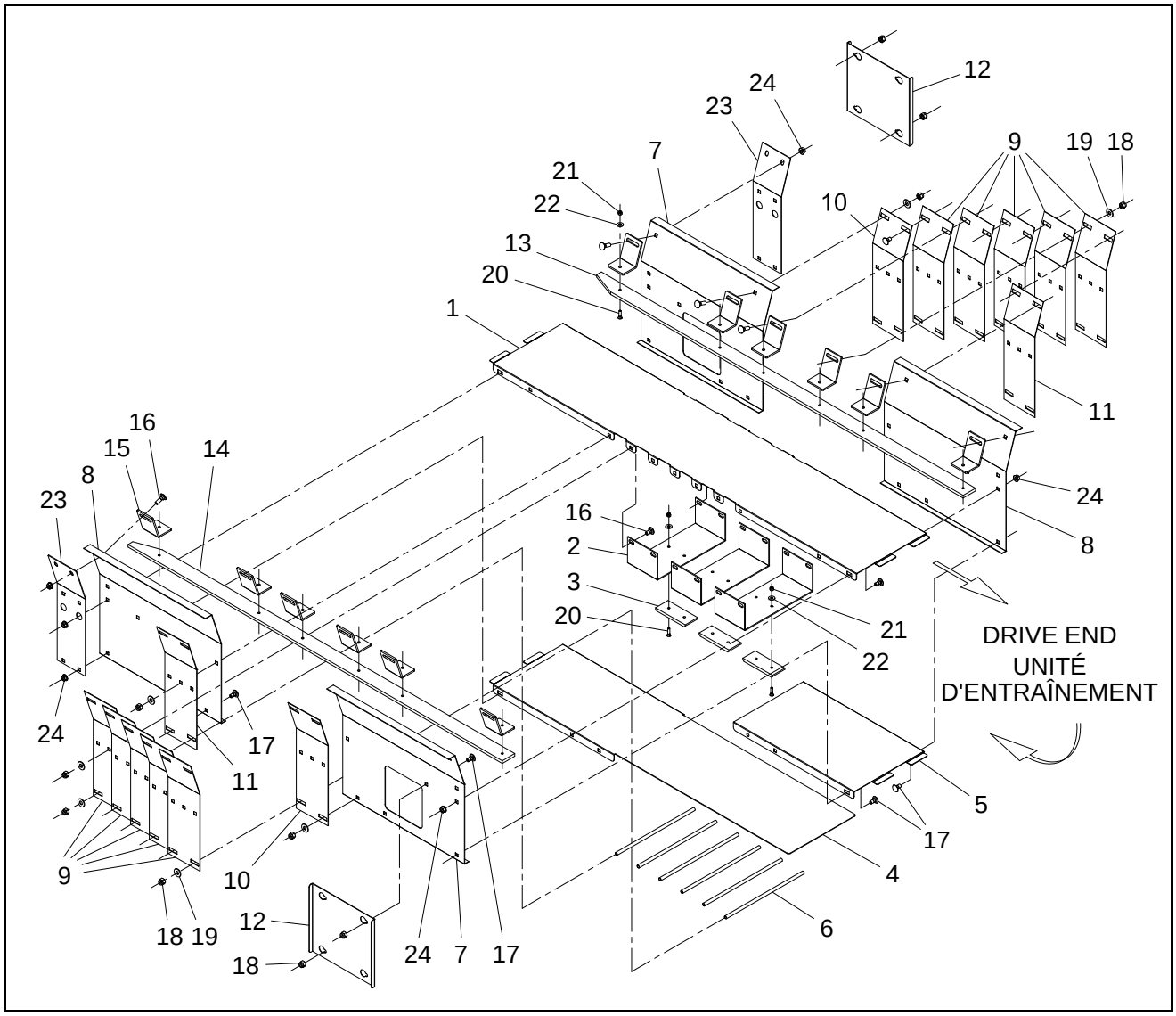
ITEM	PART NO.	DESCRIPTION
1	VS-4103	Conveyor side (2½ ft section)
	VS-4104	Conveyor side (4 ft section)
	VS-4105	Conveyor side (5 ft section)
	VS-4106	Conveyor side (8 ft section)
	VS-4107	Conveyor side (10 ft section)
2	VS-4108	Pan (2½ ft section)
	VS-4109	Pan (4 ft section)
	VS-4110	Pan (5 ft section)
	VS-4111	Pan (8 ft section)
	VS-4112	Upper pan (10 ft section)
3	VS-4119	Lower pan for 10 ft only
4	VS-4120	Pan insert for 10 ft section
5	15476	Pan clamp
6	VS-4094	Splice plate
7	VM-4034	Flow through hopper complete

ITEM	PART NO.	DESCRIPTION
		(option)
8	VM-4048	Flow through hopper cover with 10" adaptor (option)
	VM-4049	Flow through hopper cover with 12" adaptor (option)
9	VM-4045	5 ft snap-on cover (option)
	VM-4044	10 ft snap-on cover (option)
10	01C17-0112	3/8" x ¾" Hex. bolt
11		#10-24 x 5/8" Screw
12	02C07-0014	#10-24 Nut
13	01C95-0011	3/8" Flange nut
14	VS-4118	No.14 x ¾" Metal screw
15	01C04-0107	3/8" x ¾" Carriage bolt
16	01C95-0010	5/16" Flange nut
17	02C07-0017	5/16" Hex. nut



Decline assembly

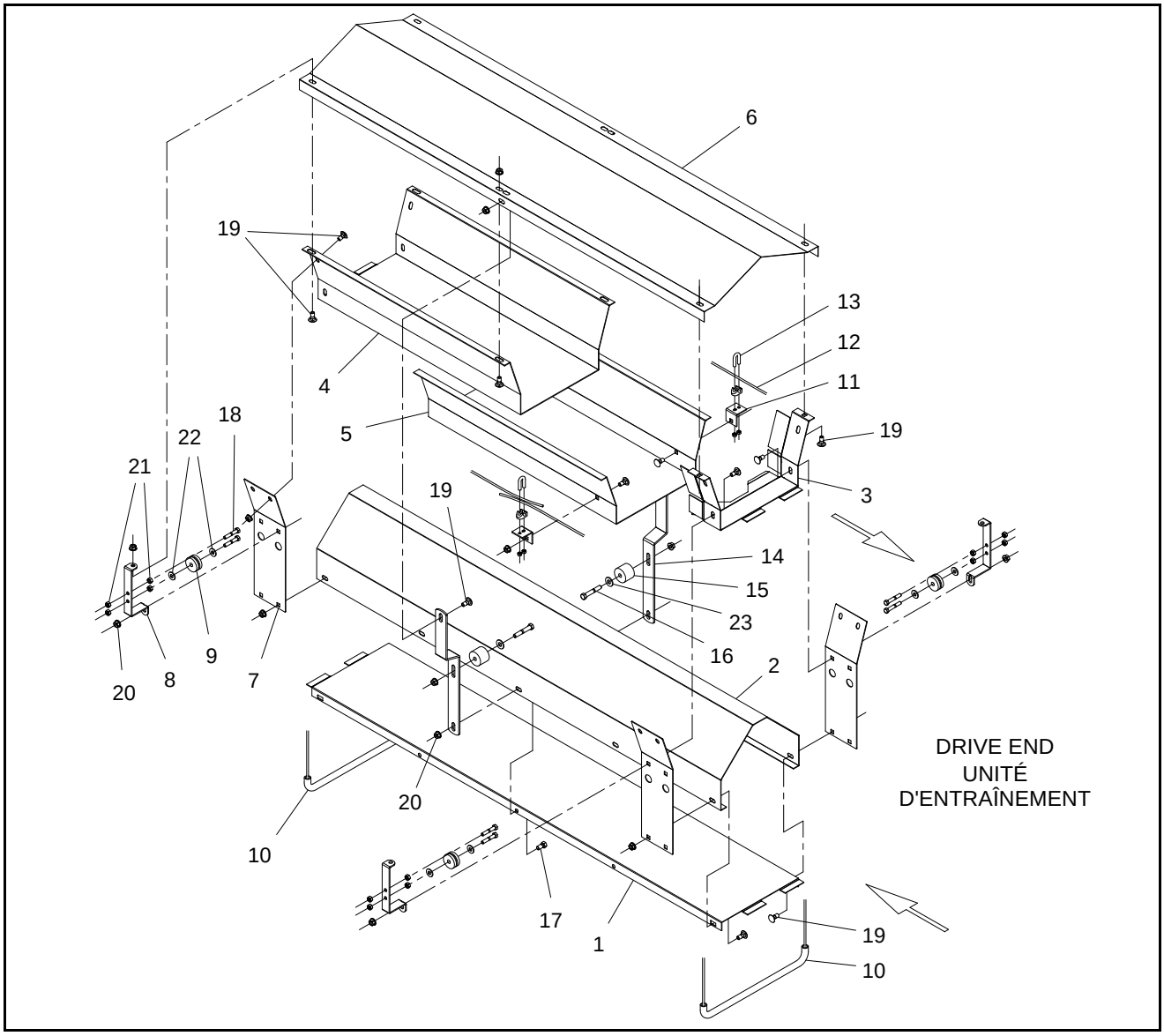
ITEM	PART NO.	DESCRIPTION
1	VS-4134	Splice plate
2	VS-4135	Splice plate
3	VS-4136	Side segment
4	VS-4137	Rod
5	VS-4138	Lower pan
6	VS-4139	Upper pan
7	VS-4140	Wear bar
8	02C36-0134	¼" x ¾" Flat head screw
9	01C04-0107	3/8" x ¾" Carriage bolt
10	VS-4136-1	Side segment
11	02C22-0009	3/8" Washer
12	01C96-0011	3/8" Lock nut
13	01C96-0009	¼" Lock nut
14	VM-4019	Cover complete (option)
15	99-349	17/32" SAE washer



Incline assembly

ITEM	PART NO.	DESCRIPTION
1	VS-4150-1	Upper pan
2	VS-4150-8	Return bracket
3	VS-4150-11	Lower wear bar
4	VS-4150-4	Lower pan long
5	VS-4150-5	Lower pan short
6	VS-4137	Rod
7	VS-4150-3	Side with window
8	VS-4150-2	Side
9	VS-4150-6	Side segment
10	VS-4150-13-D	Splice plate
11	VS-4150-13-G	Splice plate
12	VS-4150-7	Acces door
13	VS-4150-10-G	Wear bar

ITEM	PART NO.	DESCRIPTION
14	VS-4150-10-D	Wear bar
15	VS-4150-9	Wear bar support
16	01C04-0109	3/8" x 1" Carriage bolt
17	01C04-0107	3/8" x ¾" Carriage bolt
18	01C96-0011	3/8" Lock nut
19	02C22-0009	3/8" Washer
20	99-269	¼" x 1" Flat head screw
21	01C96-0009	¼" Lock nut
22	02C22-0008	¼" Washer
23	VS-4094	Splice plate
24	01C95-0011	3/8" Flange nut

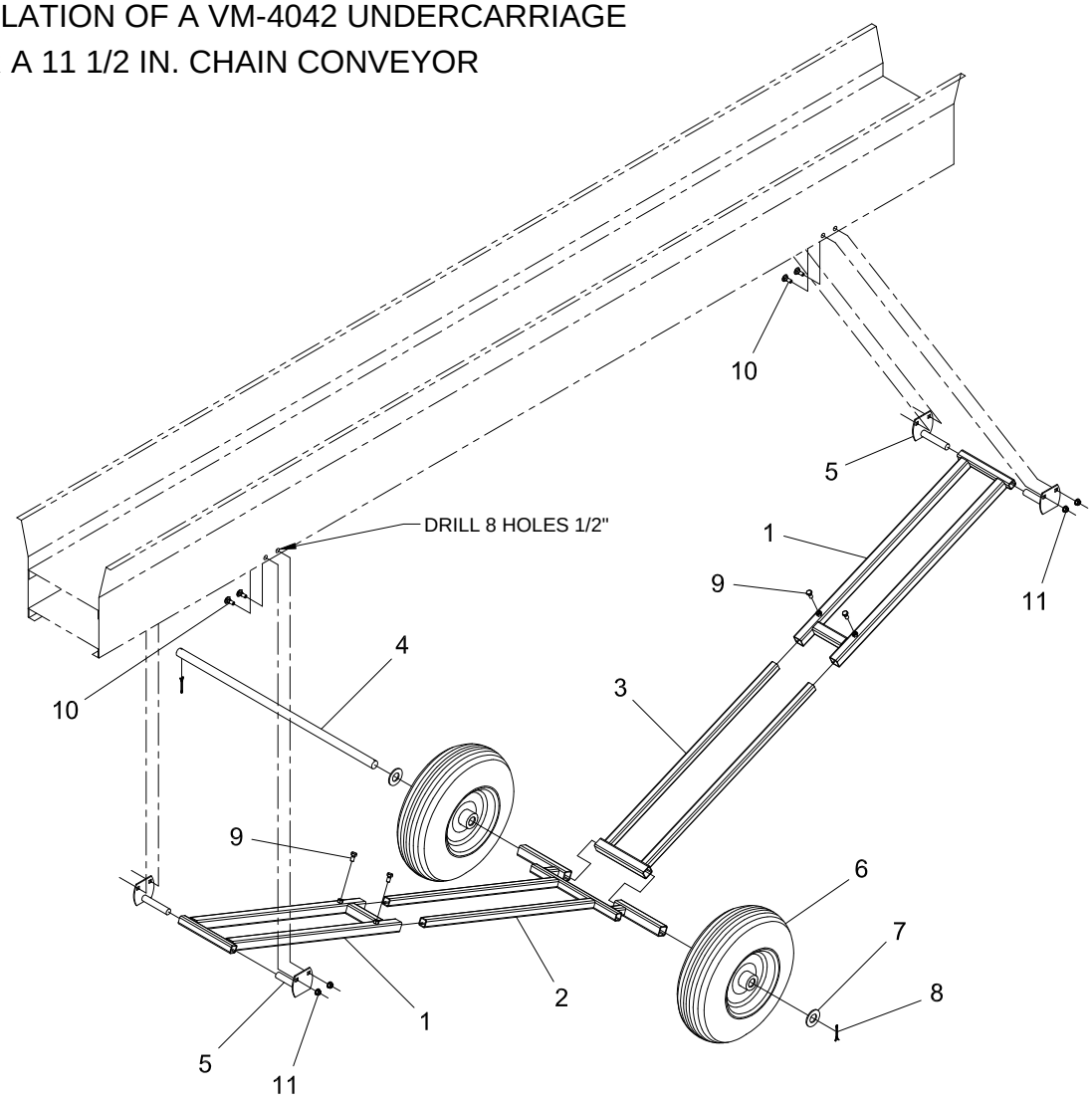


Dropout

ITEM	PART NO.	DESCRIPTION
1	VS-4110	5 ft. Pan
2	VS-4153-4	Deflector
3	VS-4153-1	Dropout end
4	VS-4153-2	Fixed section
5	VS-4153-3	Sliding section
6	VS-4153-5	Cover
7	VS-4094	Splice plate
8	VS-4153-8	Pulley support
9	VS-4153-13	Pulley
10	VS-4153-7	Handle
11	VS-4153-6	Cable bracket
12		1/8" x 21 ft. cable

ITEM	PART NO.	DESCRIPTION
13	01C81-0001	1/8" Cable clamp
14	VS-4153-12	Guide
15	CV-4418	Roller
16	01C17-0119	3/8" x 2 ¼" Hex. bolt
17	01C17-0112	3/8" x ¾" Hex. bolt
18	01C17-0063	5/16" x 1 ¾" Hex. bolt
19	01C04-0107	3/8" x ¾" Carriage bolt
20	01C95-0011	3/8" Flange nut
21	02C07-0017	5/16" Nut
22	02C22-0010	5/16" Washer
23	02C22-0009	3/8" Washer

INSTALLATION OF A VM-4042 UNDERCARRIAGE
UNDER A 11 1/2 IN. CHAIN CONVEYOR



Undercarriage

ITEM	PART NO.	DESCRIPTION
1	VS-4045	Female extension
2	VS-4048	Outer frame
3	VS-4046	Inner frame
4	VS-4047	Axle
5	VS-4044	Conveyor support
6	99-458	Complete 16" x ø1" wheel
7	02C22-0020	1" Washer
8	01C69-0159	3/16" x 1 ½" Cotter pin
9	01C17-0112	3/8" x ¾" Hex. bolt
10	01C04-0107	3/8" x ¾" Carriage bolt
11	01C96-0011	3/8" Lock nut

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